MINOR SOURCE OPERATING PERMIT
OFFICE OF AIR QUALITY

Hoosier Wood Specialties, Inc.
7224 East 900 North
Ossian, Indiana 46777

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 179-15234-00030	
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: May 22, 2002 Expiration Date: May 22, 2007

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary wood cabinet doors production facility.

Authorized Individual:	Mr. Lynn Garner
Source Address:	7224 East 900 North, Ossian, IN 46777
Mailing Address:	7224 East 900 North, Ossian, IN 46777
Phone Number:	(219) 622-1011
SIC Code:	2434
County Location:	Wells County
County Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Minor Source, under PSD Minor Source, Section 112 of the Clean Air Act Not 1 of 28 source categories.

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emission units and pollution control devices:

(a) One (1) woodworking workshop with a maximum capacity of 315 pounds of wood per hour. The woodworking workshop is controlled by a cyclone and a baghouse. The woodworking workshop bottlenecked by the assembly process. The woodworking workshop only produces 38 cabinet doors per hour.

(b) One (1) final sander with a maximum capacity of 38 cabinet doors per hour. This final sander is controlled by a cyclone and baghouse.

(c) One (1) stain spray booth with a maximum capacity of 38 cabinet doors per hour. This stain spray booth uses a maximum of 1.8 pounds of stain per hour and 0.06 pounds of paint thinner per hour. This spray booth is controlled by dry filters.

(d) One (1) sealer spray booth with a maximum capacity of 38 cabinet doors per hour. This sealer spray booth uses a maximum of 3.77 pounds of sealer per hour and 0.06 pounds of paint thinner per hour. This spray booth is controlled by dry filters.

(e) One (1) top coat spray booth with a maximum capacity of 38 cabinet doors per hour. This top coat spray booth uses a maximum of 2.83 pounds of top coat per hour and 0.06 pounds of paint thinner per hour. This spray booth is controlled by dry filters.

(f) Four (4) propane-fired forced air furnaces, identified as Heat #1, Heat #2, Heat #3, and Heat #4 with maximum capacities of 0.075, 0.25, 0.25, and 1.75 MMBtu per hour respectively.

SECTION B GENERAL CONSTRUCTION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC 13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled “Minor Source Operating Permit”, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

(a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section.

(1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.

(2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.

(b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.

(d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).

(e) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

B.7 Permit Term [326 IAC 2-6.1-7]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications or amendments of this permit do not affect the expiration.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

(a) The total source potential to emit of all criteria pollutants is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

(b) Any change or modification which may increase potential to emit to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAQ prior to making the change.

(c) Any change or modification which may increase potential to emit to 10 tons per year of any single hazardous air pollutant, twenty-five tons per year of any combination of hazardous air pollutants, or 100 tons per year of any other regulated pollutant from this source, shall cause this source to be considered a major source under Part 70 Permit Program, 326 IAC 2-7, and shall require approval from IDEM, OAQ prior to making the change.

C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;

(c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.

(b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).

(c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.6 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.7 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.8 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

Testing Requirements

C.9 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.10 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.11 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

Record Keeping and Reporting Requirements

C.12 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality(OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.13 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.14 General Record Keeping Requirements [326 IAC 2-6.1-2]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this permit;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.15 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.16 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.

(c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-6.1]:

(a) One (1) woodworking workshop with a maximum capacity of 315 pounds of wood per hour. The woodworking workshop is controlled by a cyclone and a baghouse.

(b) One (1) final sander with a maximum capacity of 38 cabinet doors per hour. This final sander is controlled by a cyclone and baghouse.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2]

(a) The particulate matter emission from the woodworking workshop shall not exceed 1.2 pounds per hour when operating at a process weight rate of 315 pounds per hour. The pounds per hour limitation was calculated with the equation below.

(b) The particulate matter emission from the final sander shall not exceed 1.1 pounds per hour when operating at a process weight rate of 315 pounds per hour. The pounds per hour limitation was calculated with the equation below.

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.2 Particulate Matter (PM)

In order to comply with D.1.1, the baghouses shall be in operation at all times the woodworking workshop and the final sander are in operation.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.3 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

D.1.4 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-6.1]:

(c) One (1) stain spray booth with a maximum capacity of 38 cabinet doors per hour. This stain spray booth uses a maximum of 1.8 pounds of stain per hour and 0.06 pounds of paint thinner per hour. This spray booth is controlled by dry filters.

(d) One (1) sealer spray booth with a maximum capacity of 38 cabinet doors per hour. This sealer spray booth uses a maximum of 3.77 pounds of sealer per hour and 0.06 pounds of paint thinner per hour. This spray booth is controlled by dry filters.

(e) One (1) top coat spray booth with a maximum capacity of 38 cabinet doors per hour. This top coat spray booth uses a maximum of 2.83 pounds of top coat per hour and 0.06 pounds of paint thinner per hour. This spray booth is controlled by dry filters.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1]

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

(a) Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets in the sealer spray booth and top coat spray booth shall utilize one of the following application methods:

Airless Spray Application
Air Assisted Airless Spray Application
Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

(b) The Permittee shall use less than or equal to 15 pounds of VOC per day in the stain spray booth.

D.2.2 Volatile Organic Compounds (VOC)

The potential to emit volatile organic compounds (VOC) from the entire source is less than one hundred (100) tons per year. Therefore, 326 IAC 2-7 is not applicable. Any change or modification which increases the potential emissions to equal to or greater than one hundred (100) tons per year must receive prior approval from IDEM, OAQ.

D.2.3 Hazardous Air Pollutants (HAP) [326 IAC 2-4.1-1]

The potential to emit hazardous air pollutants (HAPs) from the entire source is less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year for any combination of HAPs. Therefore, the provisions of 326 IAC 2-4.1-1 and 326 IAC 2-7 are not applicable. Any change or modification which increases the potential emissions to greater than ten (10) tons per year for any single HAP or greater than twenty-five (25) tons per year for any combination of HAPs must receive prior approval from IDEM, OAQ.

D.2.4 Particulate Matter (PM) [326 IAC 6-3-2]

The particulate matter (PM) from the three (3) spray booths shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

Compliance Determination Requirements

D.2.5 Particulate Matter (PM)

In order to comply with D.2.2, the dry filters shall be in operation at all times the spray booths are in operation.

D.2.6 Volatile Organic Compounds (VOC)

Compliance with the VOC usage limitations contained in Conditions D.2.1(b) and D.2.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.2.7 Hazardous Air Pollutants (HAPs)

Compliance with the HAP usage limitation contained in Condition D.1.2 shall be determined using formulation data supplied by the coating manufacturer.

D.2.8 VOC and HAP Emissions

Compliance with Condition D.1.2 and D.1.3 shall be demonstrated within 30 days of the end of each month based on the total VOC and HAP usage for the month.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.9 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks while one or more of the booths are in operation.

(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.10 Record Keeping Requirements

(a) To document compliance with Conditions D.2.2 and D.2.3, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through

(6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and HAP usage limits established in Condition D.2.2 and D.2.3.

(1) The amount and VOC and HAP content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) A log of the dates of use;

(3) The volume weighted VOC and HAP content of the coatings used for each month;

(4) The cleanup solvent usage for each month;

(5) The total VOC and HAP usage for each month; and

(6) The weight of VOCs and HAPs emitted for each compliance period.

(b) To document compliance with Conditions D.2.1(b), the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.2.1(b).

(1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) A log of the dates of use;

(3) The volume weighted VOC content of the coatings used for each day;

(4) The cleanup solvent usage for each day;

(5) The total VOC usage for each day; and

(6) The weight of VOCs emitted for each compliance period.

(c) To document compliance with Condition D.2.9, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-6.1]:

(f) Four (4) propane-fired forced air furnaces, identified as Heat #1, Heat #2, Heat #3, and Heat #4 with maximum capacities of 0.075, 0.25, 0.25, and 1.75 MMBtu per hour respectively.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1]

There are no applicable requirements for the furnaces.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Branch

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	**Hoosier Wood Specialties, Inc.**
Address:	**7224 East 900 North**
City:	**Ossian, Indiana 46777**
Phone #:	**(219) 622-1011**
MSOP #:	**179-15234-00030**

I hereby certify that Hoosier Wood Specialties, Inc. is
9 still in operation.
9 no longer in operation.

I hereby certify that Hoosier Wood Specialties, Inc. is
9 in compliance with the requirements of MSOP 179-15234-00030.
9 not in compliance with the requirements of MSOP 179-15234-00030.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100 TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY:_____PHONE NO. ( )_____
LOCATION: (CITY AND COUNTY)_____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP:_____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:_____
_____

DATE/TIME MALFUNCTION STARTED: _____/_____/ 20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:
_____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM_{10}, SO_2, VOC, OTHER:_____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____

_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
_____
_____

MALFUNCTION REPORTED BY:_____TITLE:_____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____
*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

_____

_____

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document for Minor Source Operating Permit (MSOP)

Source Background and Description

Source Name:	Hoosier Wood Specialties, Inc.
Source Location:	7224 East 900 North, Ossian, Indiana 46777
County:	Wells County
SIC Code:	2434
Operation Permit No.:	179-15234-00030
Permit Reviewer:	ERG/AR

On April 5, 2002 the Office of Air Quality (OAQ) had a notice published in the Bluffton News Banner, Bluffton, Indiana, stating that Hoosier Wood Specialties, Inc. had applied for a Minor Source Operating Permit (MSOP) to operate a stationary wood cabinet doors production facility with control. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On April 9, 2002, Mrs. Betty Welker, a citizen, submitted comments on the proposed MSOP. The summary of the comments is as follows:

Comment 1:

The OAQ received several telephone calls from Betty Welker complaining about the odor resulting from the surface coating operating at Hoosier Wood Specialties and requesting a public hearing.

Response to Comment 1:

The OAQ performed air quality modeling to determine whether the emissions of hazardous air pollutants from Hoosier Wood Products had the potential to cause a significant threat to public health. There are currently no ambient air standards for these pollutants. However, OSHA has established Permissible Exposure Levels (PEL) for these pollutants in the workplace. The results of the OAQ's modeling indicate that the increase ambient concentrations of all of the regulated pollutants would be low and would be less than one half of one percent of the OSHA PEL. While these workplace standards are not public health standards, the OAQ believes that pollutant concentrations at these levels do not pose a significant risk to public health.

The results of this analysis and the OAQ's authority to address odors was discussed with Mrs. Welker. The IDEM does not have specific authority to regulate odors. Odor issues are most commonly addressed at the local level, such as zoning or land use ordinances. The information available to the OAQ does not indicate that Hoosier Wood Specialties would cause a threat to public health.

The issue of a public hearing was also discussed with Mrs. Welker. Unless new issues were raised at the hearing, the OAQ's responses to her comments would be similar to those conveyed during the telephone

conversations. Mrs. Welker requested that a meeting be arranged, in lieu of a hearing, that included herself and her son; representatives of Hoosier Wood Specialties; representatives of John Roembke, owner of the building leased by Hoosier Wood Specialties; the OAQ; and Steve Wesner the commercial real estate broker involved with the lease. The meeting was scheduled for May 20, 2002 at 2:30 p.m. in Ossian.

Due to an unforeseen problem with Mrs. Welker schedule, neither she nor her son attended the meeting on May 20. In a telephone conversation with the OAQ on May 21 it was agreed that the problem was unfortunate, but that the OAQ would proceed with the permit decision, along with a discussion of the concerns that she had raised. Mrs. Welker was also informed that the final decision would include instructions on how to file objections if she was not satisfied that the OAQ had properly exercised its authority.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a
Minor Source Operating Permit

Source Background and Description

Source Name:	Hoosier Wood Specialties, Inc.
Source Location:	7224 East 900 North, Ossian, Indiana 46777
County:	Wells County
SIC Code:	2434
Operation Permit No.:	179-15234-00030
Permit Reviewer:	ERG/AR

The Office of Air Quality (OAQ) has reviewed an application from Hoosier Wood Specialties, Inc. relating to the construction and operation of a wood cabinet doors production facility.

Permitted Emission Units and Pollution Control Equipment

There are no permitted facilities operating at this source during this review process.

Unpermitted Emission Units and Pollution Control Equipment

(a) One (1) woodworking workshop with a maximum capacity of 315 pounds of wood per hour. The woodworking workshop is controlled by a cyclone and a baghouse. The woodworking workshop bottlenecked by the assembly process. The woodworking workshop only produces 38 cabinet doors per hour.

(b) One (1) final sander with a maximum capacity of 38 cabinet doors per hour. This final sander is controlled by a cyclone and baghouse.

(c) One (1) stain spray booth with a maximum capacity of 38 cabinet doors per hour. This stain spray booth uses a maximum of 1.8 pounds of stain per hour and 0.06 pounds of paint thinner per hour. This spray booth is controlled by dry filters.

(d) One (1) sealer spray booth with a maximum capacity of 38 cabinet doors per hour. This sealer spray booth uses a maximum of 3.77 pounds of sealer per hour and 0.06 pounds of paint thinner per hour. This spray booth is controlled by dry filters.

(e) One (1) top coat spray booth with a maximum capacity of 38 cabinet doors per hour. This top coat spray booth uses a maximum of 2.83 pounds of top coat per hour and 0.06 pounds of paint thinner per hour. This spray booth is controlled by dry filters.

(f) Four (4) propane-fired forced air furnaces, identified as Heat #1, Heat #2, Heat #3, and Heat #4 with maximum capacities of 0.075, 0.25, 0.25, and 1.75 MMBtu per hour respectively.

New Emission Units and Pollution Control Equipment Receiving Prior Approval

There are no new construction activities included in this permit.

Existing Approvals

The source has not been operating under any previous approvals.

Enforcement Issue

(a) IDEM is aware that equipment has been constructed prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled Unpermitted Emission Units and Pollution Control Equipment.

(b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
#1	Top coat spray booth	17	2	7,000	72
#2	Stain spray booth	17	2.25	8,750	72
#3	Sealer spray booth	19	2	7,000	72

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on January 15, 2002, with additional information received on February 22, 2002.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (5 pages).

Potential To Emit of Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	44.61

PM-10	44.61
SO_2	negligible
VOC	28.99
CO	0.40
NO_x	2.10

Note: The woodworking workshop is bottlenecked by the assembly process. The woodworking workshop only produces 38 cabinet doors per hour.

HAP's	Potential To Emit (tons/year)
N-Butyl Alcohol	3.61
Toluene	4.25
Xylene	1.85
TOTAL	10.72

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are greater than 25 tons per year, therefore, the source is subject to the provisions of 326 IAC 2-6.1.

(c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year, therefore, the source is not subject to the provisions of 326 IAC 2-7.

County Attainment Status

The source is located in Wells County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Wells County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Wells County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	0.53
PM_{10}	0.53
SO_2	negligible
VOC	28.99
CO	0.40
NO_x	2.10
Single HAP	4.25
Combination HAPs	10.72

Note: Cyclones and baghouses are 99% efficient
Dry filters are 99% efficient.

(a) This new source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,

(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and

(c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source. The source has HAPs emissions below ten (10) tons per year of a single HAP and twenty-five (25) tons per year of any combination of HAPs. Thus, the source is not a major HAP source and is therefore not subject to the requirements of 40 CFR Part 63, Subpart JJ (National Emission Standards for Wood Furniture Manufacturing Operations).

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Wells County and the potential to emit all pollutants is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of the spray booths will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 8-1-6 (New Facilities - General Reduction Requirements)

The spray booths are not subject to 326 IAC 8-1-6, because they are subject to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating).

326 IAC 6-3-2 (Process Operations)

(a) The particulate matter emission from the woodworking workshop shall not exceed 1.2 pounds per hour when operating at a process weight rate of 315 pounds per hour. The pounds per hour limitation was calculated with the equation below.

(b) The particulate matter emission from the final sander shall not exceed 1.1 pounds per hour when operating at a process weight rate of 315 pounds per hour. The pounds per hour limitation was calculated with the equation below.

(c) The particulate matter (PM) from the three (3) spray booths shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The dry filters shall be in operation at all times the spray booths are in operation and the cyclones and baghouses should be in operation at all times the woodworking workshop and the final sander are in operation, in order to comply with this limit.

326 IAC 8-2-10 (Flat Wood Panel; Manufacturing Operations)

326 IAC 8-2-10 (Flat Wood Panel; Manufacturing Operations) is not applicable to this source because this rule applies to sources constructing wood panels. This source constructs wood cabinets.

326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)

The three (3) spray booths are located in Wells County and were constructed after July 1, 1990. The top coat spray booth and sealer spray booth have actual emissions of greater than 15 pounds of VOC per day before add-on controls, therefore 326 IAC 8-2-12 applies to the top coat and sealer spray booth. Based on information provided by the source, the stain spray booth has actual emissions of less than 15 pounds of VOC per day before add-on controls; therefore, 326 IAC 8-2-12 does not apply to the stain spray booth. Pursuant to this rule, the surface coating applied to the wood cabinets shall utilize one of the following application methods:

Airless Spray Application
Air Assisted Airless Spray Application
Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating

Brush or Wipe Application
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

The source will comply with this rule by using HVLP spray application method.

326 IAC 8-11 (Wood Furniture Coating)

326 IAC 8-11 (Wood Furniture Coating) is not applicable to this source because this rule pertains to wood furniture coating in Lake, Porter, Clark, or Floyd Counties. This source is located in Wells County.

Compliance Requirements

The woodworking workshop and final sander are not required to perform daily visible emissions notations, weekly pressure drop readings of the baghouses, or quarterly baghouse inspections because of the following:

(a) There are no NSPS or NESHAP's applicable to this source;

(b) There is a control device and the allowable emissions for the controlled pollutant do not exceed 10 pounds per hour; and

(c) There are no conditions limiting the potential to emit.

The three (3) spray booths and four (4) furnaces are not required to perform visible emission notations once per shift during normal daylight hours because of the following:

(a) There are no NSPS or NESHAP's applicable to this source;

(b) There is no control device and the actual emissions do not exceed 25 tons per year;

(c) There are no conditions limiting the potential to emit.

Conclusion

The construction and operation of this wood cabinet doors production facility shall be subject to the conditions of the attached Minor Source Operating Permit 179-15234-00030.

Air Quality Modeling Results
Company Name: Hoosier Wood Specialties, Inc.
Address City IN Zip: 7224 East 900 North, Ossian, Indiana 46777
CP: 179-15234
Plt ID: 179-00030
Date: 5/22/02

Hazardous Air Pollutant	Potential Emissions(tons/year)	Predicted Concentration(ug/m3)	Permissible Exposure Levels (PEL)	% of PEL
Xylene	1.85	25.2	435000	0.00579
Toluene	4.25	108	750000	0.0144
N-butyl Alcohol	3.61	48.76	N/A	
Ethylbenzene	0.37	5.17	435000	0.00119
Methanol	0.28	4.19	260000	0.00161
Methyl Ethyl Ketone	0.14	2.33	590000	0.00039
Methyl Isobutyl Keto	0.14	2.33	410000	0.00057
Formaldehyde	0.09	2.29	930	0.24624

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Company Name: Hoosier Wood Specialties, Inc.
Address City IN Zip: 7224 East 900 North, Ossian, Indiana 46777
CP: 179-15234
Plt ID: 179-00030
Reviewer: ERG/AR
Date: 2/25/02

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Top Coat Spray Booth																
Valtec WW LAC-40	7.7	74.56%	0.0%	74.6%	0.0%	19.94%	0.01000	38.000	5.71	5.71	2.17	52.09	9.51	1.14	28.64	65%
PS-0125 Thinner	6.9	100.00%	0.0%	100.0%	0.0%	0.00%	0.00040	38.000	6.90	6.90	0.10	2.52	0.46	0.00		65%
Stain Spray Booth																
Maple Stain T-1901	7.7	73.80%	0.0%	73.8%	0.0%	19.94%	0.00600	38.000	5.65	5.65	1.29	30.93	5.65	0.70	28.35	65%
PS-0125 Thinner	6.9	100.00%	0.0%	100.0%	0.0%	0.00%	0.00040	38.000	6.90	6.90	0.10	2.52	0.46	0.00		65%
Sealer Spray Booth																
Valtec WW LAC-40	7.7	74.56%	0.0%	74.6%	0.0%	19.94%	0.01300	38.000	5.71	5.71	2.82	67.71	12.36	1.48	28.64	65%
PS-0125 Thinner	6.9	100.00%	0.0%	100.0%	0.0%	0.00%	0.00040	38.000	6.90	6.90	0.10	2.52	0.46	0.00		65%
State Potential Emissions			**Add worst case coating to all solvents**								**6.60**	**158.29**	**28.89**	**3.31**		

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emission Calculations
HAP Emission Calculations

Company Name: Hoosier Wood Specialties, Inc.
Address City IN Zip: 7224 East 900 North, Ossian, Indiana 46777
CP#: 179-15234
Plt ID: 179-00030
Permit Reviewer: ERG/AR
Date: 2/25/02

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % N-Butyl Alcohol	Weight % Ethylbenzene	Weight % Methanol	Weight % Methyl Ethyl	Weight % Methyl Isobutyl	Weight % Formaldehyde	Xylene Emission (ton/yr)	Toluene Emissions (ton/yr)	N-Butyl Alcohol Emissions	Ethylbenzene Emissions (ton/yr)	Methanol Emissions (ton/yr)	Methyl Ethyl (ton/yr)	Methyl Isobutyl (ton/yr)	Formaldehyde (ton/yr)
Spray Booth 1																			
Valtec WW LAC-40	7.66	0.01000	38.00	5.00%	10.00%	11.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.64	1.27	1.40	0.13	0.00	0.00	0.00	0.00
PS-0125 Thinner	6.9	0.00040	38.00	0.00%	40.00%	0.00%	0.00%	20.00%	10.00%	10.00%	0.00%	0.00	0.18	0.00	0.00	0.09	0.05	0.05	0.00
Spray Booth 2																			
Maple Stain T-1901	7.66	0.00600	38.00	5.00%	10.00%	5.00%	1.00%	0.00%	0.00%	0.00%	1.00%	0.38	0.76	0.38	0.08	0.00	0.00	0.00	0.08
PS-0125 Thinner	6.9	0.00040	38.00	0.00%	40.00%	0.00%	0.00%	20.00%	10.00%	10.00%	0.00%	0.00	0.18	0.00	0.00	0.09	0.05	0.05	0.00
Spray Booth 3																			
Valtec WW LAC-40	7.66	0.01300	38.00	5.00%	10.00%	11.00%	1.00%	0.00%	0.00%	0.00%	0.10%	0.83	1.66	1.82	0.17	0.00	0.00	0.00	0.02
PS-0125 Thinner	6.9	0.00040	38.00	0.00%	40.00%	0.00%	0.00%	20.00%	10.00%	10.00%	0.00%	0.00	0.18	0.00	0.00	0.09	0.05	0.05	0.00
Total State Potential Emissions												**1.85**	**4.25**	**3.61**	**0.37**	**0.28**	**0.14**	**0.14**	**0.09**

METHODOLOGY

Total HAPs = 10.72 tons/year

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emission Calculations
LPG-Propane - Industrial Boilers
(Heat input capacity: > 10 MMBtu/hr and < 100 MMBtu/hr)

Company Name: **Hoosier Wood Specialties, Inc.**
Address City IN Zip: **7224 East 900 North, Ossian, Indiana 46777**
CP: **179-15234**
Plt ID: **179-00030**
Reviewer: **ERG/AR**
Date: **2/25/02**

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	SO2 Emission factor = 0.10 x S S = Sulfur content =	0.60 grains/100ft^3
2.33	222.59		

*Includes the following forced-air furnaces: One (1) 0.075 MMBtu/hr unit; Two (2) 0.25 MMBtu/hr units; and One (1) 1.75 MMBtu/hr unit.

	Pollutant					
	PM*	PM10*	SO2	NO_x	VOC	CO
Emission Factor in lb/kgal	0.6	0.6	0 *(0.10 S)*	19.0	0.5 **TOC value	3.2
Potential Emission in tons/yr	0.1	0.1	0.0	2.1	0.1	0.4

*PM emission factor is filterable PM only. PM10 emission factor is assumed to be the same as PM based on a footnote in Table 1.5-1, therefore PM10 is filterable only as well.
**The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

Methodology

1 gallon of LPG has a heating value of 94,000 Btu
1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for propane)
(Source - AP-42 (Supplement B 10/96) page 1.5-1)
Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Emission Factors are from AP42 (Supplement B 10/96), Table 1.5-1 (SCC #1-02-010-02)

Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal) / 2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

Woodworking Workshop and Final Sander
Company Name: Hoosier Wood Specialties, Inc.
Address City IN Zip: 7224 East 900 North, Ossian, Indiana 46777
CP: 179-15234
Plt ID: 179-00030
Reviewer: ERG/AR
Date: 2/25/02

Main Dust Collector

Grain Loading =	0.0017	gr/ascf
Control Efficiency =	99	%
Air Flow Rate =	24,000	acfm
Controlled PM and PM10 Emissions =	0.36	tons/year
Uncontrolled PM and PM10 Emissions =	36.37	tons/year

Final Sander Dust Collector

Grain Loading =	0.0017	gr/ascf
Control Efficiency =	99	%
Air Flow Rate =	3,200	acfm
Controlled PM and PM10 Emissions =	0.05	tons/year
Uncontrolled PM and PM10 Emissions =	4.85	tons/year

Total Uncontrolled PM and PM10 Emissions From Woodworking =	41.22	tons/year

Methodology:
Controlled Emissions = (Grain Loading)*(Air Flow Rate)*(60 min/hr)*(8 hr/day)*(5 days/week)*(52 weeks/yr)*(1 lb/7000 gr)*(1 ton/2000 lbs)
Uncontrolled Emissions = Controlled Emissions/(1-control efficiency)
*Note: 8 hours a day, 5 days a week, and 52 weeks a year was used to take into account the sources bottle neck that they can only assemble 38 doors per hour.

Summary Table

Company Name: **Hoosier Wood Specialties, Inc.**
Address City IN Zip: **7224 East 900 North, Ossian, Indiana 46777**
CP: **179-15234**
Plt ID: **179-00030**
Reviewer: **ERG/AR**
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Potential To Emit in Tons/Year

	PM	PM10	SO2	Nox	VOC	CO	HAPs
Spray Booths	3.31	3.31	---	---	28.89	---	10.72
Furnace	0.10	0.10	---	2.10	0.10	0.40	---
Woodworking	41.20	41.20	---	---	---	---	---
Total	44.61	44.61	---	2.10	28.99	0.40	10.72

*Note: There is not a single HAP emitted from this source with emissions greater than 10 tons of HAP per year.